


Cancer, Suffering, and the Role of Social Media: Insights from Iranian Nurses

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Article Info	Abstract
<p>Original Article</p> <p>Main Object: Healthcare</p> <p>Received: 27 April 2025 Revised: 28 April 2025 Accepted: 28 April 2025 Published online: 28 2025</p> <p>Keywords: cancer care, digital health, oncology nursing, patient morale, social media.</p>	<p>Background: Social media platforms are increasingly used in healthcare to provide psychosocial support to cancer patients. Despite global enthusiasm, concerns about misinformation and emotional vulnerability persist. In Iran, cultural and regulatory contexts add complexity to this dynamic, necessitating a localized understanding of healthcare providers' perspectives.</p> <p>Aims: This study aims to explore Iranian oncology nurses' perceptions of the benefits and risks associated with hospitalized cancer patients' use of social media, and to identify factors influencing these perceptions.</p> <p>Methodology: A cross-sectional survey was conducted among 131 oncology nurses from various hospitals in Iran, primarily in Tehran. Participants completed a structured questionnaire assessing demographics, life satisfaction, personal social media use, and perceptions of social media's impact on patient morale. Data were analyzed using descriptive statistics, Pearson correlation, and path analysis.</p> <p>Results: Overall, nurses held a positive view of social media's role in enhancing patient morale, with a mean perception score of 7.1/10. Younger nurses and those with junior professional ranks exhibited more favorable attitudes. Personal social media usage positively correlated with optimistic perceptions, while life satisfaction showed a weak but significant positive association. Path analysis indicated that daily social media usage and younger age were the strongest predictors of positive perceptions. Some nurses, however, expressed concerns about misinformation and patient vulnerability.</p> <p>Conclusions: The findings highlight the generally favorable yet nuanced attitudes of Iranian oncology nurses toward social media use by cancer patients. Efforts to enhance digital literacy among healthcare providers and culturally sensitive strategies are recommended to maximize social media's psychosocial benefits while mitigating associated risks.</p>

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1. Introduction

The integration of social media into healthcare systems has profoundly altered how patients interact with information, support networks, and healthcare providers. Particularly in oncology, where patients face prolonged treatment trajectories and significant emotional burdens, social media has emerged as a critical adjunct to conventional psychosocial support structures (Ventola, 2014). Platforms such as Facebook, Instagram, and Twitter facilitate not only information dissemination but also peer-to-peer support, offering cancer patients spaces to share their experiences, seek emotional reassurance, and gather practical advice from others undergoing similar journeys (Househ, 2013). The global reach and real-time connectivity afforded by social media introduce novel possibilities for improving patient morale and engagement, yet they also raise concerns regarding information quality, privacy, and the exacerbation of anxiety (Moorhead et al., 2013). Yet, scholars are generally pessimist about the general impact of social media on mental health. In their critical evaluation of the impact of social media in mental health, Nosraty, Sakhaei, & Rezaei, (2021) produce convincing evidences that show how social media might produce negative outcomes on one's mental well-being. They claim that excessive use of social media can severely impact mental health, leading to increased feelings of anxiety, depression, and loneliness. Constant exposure to idealized images and curated lifestyles often fosters unhealthy comparisons and low self-esteem. Additionally, they say that cyberbullying and online harassment can cause emotional distress and social withdrawal. The addictive nature of social media platforms also disrupts sleep patterns and reduces face-to-face interactions, further exacerbating feelings of isolation and emotional instability over time. Yet, their warning was only general and they never denied possible positive outcomes social media might have for different social groups like hospitalized patients.

In oncology care, psychosocial support plays a pivotal role in influencing patient outcomes. Patients grappling with cancer frequently experience heightened levels of anxiety, depression, and social isolation, particularly during extended hospital stays (Jacobsen & Jim, 2008). In this context, social media offers a readily accessible source of companionship, hope, and shared knowledge. Research indicates that online communities for cancer patients not only facilitate emotional coping but also enhance patients' perceptions of agency and control over their health (Zhao & Zhang, 2017). The ability to access narratives of survivorship, participate in virtual support groups, and maintain communication with distant family members can significantly alleviate the psychological distress associated with hospitalization. Consequently, understanding healthcare providers' attitudes toward patient engagement with social media becomes essential, as these

perspectives directly influence how patients are guided in their use of digital resources (Antheunis et al., 2013).

While the benefits of social media for patient well-being are increasingly acknowledged, concerns persist regarding the dissemination of misinformation and the challenges of maintaining professional boundaries online. Studies have found that health-related content on social media is highly variable in quality, with significant portions of information lacking scientific verification or being influenced by commercial interests (Wang et al., 2019). For cancer patients, exposure to unverified alternative treatments or sensationalized narratives can undermine trust in evidence-based medical advice and potentially lead to harmful decision-making (Jensen et al., 2014). Healthcare providers, including nurses, often express ambivalence toward the use of social media by patients, weighing the potential for empowerment against the risks of misinformation and emotional vulnerability (George et al., 2013).

Nurses occupy a central role in the psychosocial care of hospitalized patients, serving not only as medical caregivers but also as sources of emotional support and information (Kagan & Melendez-Torres, 2015). Their perceptions of social media's role in patient care are particularly influential, as nurses often provide guidance on trustworthy sources of information and help patients interpret medical data. Previous studies have shown that healthcare providers' acceptance of digital health tools, including social media, is shaped by factors such as personal technology use, perceived ease of use, perceived usefulness, and broader organizational culture (Gagnon et al., 2012). Age, professional experience, and personal attitudes toward innovation also moderate healthcare professionals' openness to integrating new technologies into patient care. Thus, exploring the relationship between nurses' demographic characteristics, personal social media usage, and life satisfaction provides critical insights into how digital interventions can be effectively introduced into oncology settings.

In Iran, the cultural context adds further complexity to the discussion of social media use among cancer patients and healthcare providers. Despite rapid growth in internet and smartphone adoption, Iranian society continues to navigate tensions between modern technological engagement and traditional cultural values (Tomraee et al., 2024). Access to certain social media platforms is restricted, and concerns about data privacy and online ethics are heightened within the sociopolitical framework (Zamani et al., 2021). These factors may influence Iranian nurses' perceptions of the appropriateness and efficacy of social media as a tool for patient support. Additionally, high workloads, emotional strain, and resource limitations common in Iranian hospitals could affect nurses' willingness or ability to encourage social media use among their patients (Shirazi et al., 2020).

Understanding nurses' attitudes toward patient use of social media

in cancer wards is not merely an academic exercise; it has practical implications for clinical practice, patient satisfaction, and health outcomes. When nurses perceive social media as beneficial, they are more likely to integrate it into patient education and psychosocial interventions. Conversely, skepticism or negative perceptions may lead to underutilization of valuable digital resources or to overly cautious restrictions on patient engagement (Lupiáñez-Villanueva et al., 2009). Furthermore, the emotional resilience and life satisfaction of nurses themselves may modulate their views, with higher satisfaction potentially correlating with more optimistic attitudes toward patient-centered innovations (Dyrbye et al., 2017).

This study addresses a critical gap by investigating the perceptions of Iranian oncology nurses regarding the use of social media by hospitalized cancer patients. It examines the relationships between demographic variables (age, gender, professional rank), personal social media usage patterns, and life satisfaction levels to understand the multifactorial influences on these perceptions. In doing so, the research aims to contribute to the development of culturally sensitive guidelines and interventions that enhance psychosocial support for cancer patients in Iran and similar contexts.

2. Review of literature

Sugawara et al. (2012) investigated the use of Twitter as a platform for cancer patients to build online communities and exchange information. Recognizing the growing trend of patients seeking medical information and support online, the study aimed to characterize the nature of communication among cancer patients on Twitter. The authors analyzed a dataset comprising 731 Twitter accounts featuring cancer-related terminology and identified 51 "power accounts"—defined as those with 500 or more followers—following established methodology. A detailed examination was conducted on the most-followed female patient account to assess the content and relational dynamics of her tweets. Contrary to the researchers' original hypothesis that patients would primarily share clinical news and treatment updates, the majority of tweets centered around personal greetings, treatment discussions, and expressions of psychological support. The findings highlighted the role of Twitter not only as an information-sharing tool but also as a vital medium for emotional and social support within the cancer patient community. The study concluded that Twitter serves as an important, evolving platform for fostering a supportive network among cancer patients.

Braun et al. (2019) conducted a study to assess the information needs, communication behaviors, and social media usage among cancer patients and their relatives. The researchers developed a standardized questionnaire that incorporated sections on these topics, alongside a validated instrument measuring eHealth literacy. Distribution of the

questionnaire occurred online through collaboration with bloggers and social media group leaders. Findings indicated that the Internet served as the primary source of information for 77.4% of participants, although a majority (85.9%) still preferred receiving information directly from their doctors. Trust was highest in oncologists (71.6%), despite the widespread use of social media for connecting with peers (80.3%) and strengthening bonds with family members (81.6%). Notably, nearly half of the participants (49.2%) reported that their cancer diagnosis motivated them to become more active on social media. The authors concluded that while social media is an increasingly significant source of information for cancer patients, ensuring the quality and reliability of health information on these platforms is a crucial objective for healthcare systems.

Stiles and Mynard (2021) discussed the expanding role of social media in the communication between cancer patients and healthcare providers. As patients increasingly seek medical information online, social media has emerged as a crucial tool for facilitating access to expert knowledge, support groups, and advocacy communities. The authors emphasized that social media empowers cancer patients by broadening access to information and fostering peer support. Simultaneously, healthcare providers are establishing a stronger presence on these platforms to meet patient needs, promote health-related education, and encourage behaviors such as cancer screening. Additionally, the article highlighted social media's utility in research, enabling enhanced networking, patient recruitment, and the rapid dissemination of new findings. Tools such as "Tweet chats" and conference hashtags further illustrate the potential of social media to rapidly share up-to-date information. Overall, Stiles and Mynard positioned social media as a vital bridge that improves communication and accessibility between modern patients and healthcare professionals.

Falasi et al. (2017) conducted a systematic literature review to synthesize existing research on the use of social media by breast cancer survivors. Adhering to PRISMA guidelines, the authors searched four electronic databases for studies published between 2005 and 2015, ultimately including 98 publications comprising commentaries, reviews, descriptive studies, and intervention studies. Online support groups emerged as the most frequently studied social media platform, followed by interactive message boards and web forums. The review revealed a predominant focus on psychosocial well-being as an outcome of interest, although few studies utilized standardized measures of social media engagement. Furthermore, while content analysis of social media interactions was common, there was a notable lack of studies directly linking social media content to health outcomes. The authors also highlighted a significant gap in research addressing the experiences of non-Caucasian populations. They concluded that social media holds considerable potential for supporting breast cancer

survivors, but emphasized the need for future research to connect social media activity more directly to psychosocial, behavioral, and physical health outcomes.

Attai et al. (2015) evaluated the effectiveness of Twitter as a tool for breast cancer patient education and support through a patient-reported outcomes survey. The study surveyed participants involved in a Twitter-based breast cancer community to assess the platform's impact on patient education, support, and engagement. Results indicated that patients found Twitter to be an effective medium for obtaining information, sharing experiences, and receiving emotional support. The majority of respondents reported that participation positively influenced their decision-making and sense of empowerment regarding their care. The authors concluded that social media, and Twitter in particular, serves as a valuable resource for breast cancer education and psychosocial support.

Tapi Nzali et al. (2017) explored the use of social media as a resource for understanding the quality of life concerns of breast cancer patients by applying topic analysis techniques to patient-generated content. The study aimed to detect topics discussed on social media platforms and assess their alignment with functional and symptomatic dimensions measured by standardized quality of life questionnaires, specifically the EORTC QLQ-C30 and QLQ-BR23. Using latent Dirichlet allocation (LDA) for topic modeling on datasets from public Facebook groups and a French breast cancer forum (cancerdusein.org), the researchers identified a strong correspondence between social media discussions and questionnaire topics, with 22 out of 23 standardized topics being reflected in patient conversations. Additionally, they found five topics emerging from social media that were not captured by existing questionnaires, suggesting potential areas for future survey refinement. The results emphasized that quality of life issues are a major focus for breast cancer patients online and demonstrated that social media mining can complement traditional quality of life assessments by revealing emerging patient concerns.

Perales et al. (2016) reviewed the role of social media in supporting adolescent and young adult (AYA) cancer patients, a group recognized by the National Cancer Institute as having unique clinical and psychosocial needs. The authors noted that over 70,000 individuals aged 15 to 39 are diagnosed with cancer annually in the United States, facing not only diverse cancer types—including those typical of pediatric and adult populations—but also distinct challenges such as fertility concerns, relationship dynamics, autonomy loss, and financial strain due to disruptions in education and employment. Given that up to 90% of adults aged 18 to 29 actively use social networking sites, social media represents a particularly relevant medium for this demographic. The review discussed how social media platforms provide AYAs with access to information, peer support, and resources

specifically tailored to their age-specific concerns. The authors highlighted the growing number of online communities and initiatives aimed at connecting AYAs with cancer, thereby addressing gaps in traditional support services and enhancing patients' engagement and empowerment.

Gage-Bouchard et al. (2018) examined the scientific accuracy of cancer-related information shared on social media, focusing on Facebook pages managed by parents of children with acute lymphoblastic leukemia. Conducting a content analysis of 12 months of posts (N= 15,852) from 18 publicly available Facebook pages, the authors identified 171 posts containing medically-oriented information. Posts were categorized by theme and independently evaluated for accuracy by two oncology experts. The most frequently discussed topics were treatment protocols and health services use (35%), followed by side effects and late effects (26%), medications (16%), medical caregiving strategies (13%), and alternative or complementary therapies (8%). Overall, 67% of posts were found to be scientifically accurate, while 19% contained inaccuracies and 14% referenced unproven treatment modalities. The study highlighted both the potential benefits and the risks of relying on social media for cancer information, emphasizing the need for healthcare providers to guide patients and caregivers toward reliable, evidence-based sources.

Chou et al. (2011) conducted a narrative analysis to explore the thematic and linguistic characteristics of personal cancer survivorship stories shared on YouTube. Aiming to better understand this evolving form of communication among survivors, the authors performed an iterative, bottom-up analysis of 35 videos identified using the search terms "cancer survivor" and "cancer stories". The study found that 86% of the narratives included a subnarrative focused on the cancer diagnosis, often characterized by dramatic tension, emotional engagement, feelings of lost agency, depersonalized references to medical personnel, and the unexpected nature of the diagnosis. The analysis emphasized the importance of authenticity and emotional resonance in these personal stories. The authors concluded that the internet has enabled an efficient and meaningful platform for sharing cancer experiences, offering insights that can guide the development of narrative-based communication strategies that prioritize genuine emotional connection.

Prochaska, Coughlin, and Lyons (2017) reviewed the expanding role of social media and mobile health (mHealth) technologies in cancer prevention, treatment, and survivorship. Recognizing the widespread adoption of smartphones and internet access, they highlighted the potential of these digital tools for large-scale patient engagement, social support, and health behavior change at relatively low cost. The authors discussed key principles for effective intervention design, including fostering social support, enhancing health communication, promoting

self-regulation, and maintaining user motivation. They also summarized applications across various platforms, from general social networks like Facebook to condition-specific communities such as PatientsLikeMe. The review underscored promising case studies, such as the Tweet2Quit smoking cessation program, and examined the role of mHealth apps and wearable devices, although they noted a paucity of rigorous evaluations demonstrating behavior change outcomes. Concerns about data security, privacy, and the need for regulatory oversight were emphasized, particularly given the sensitivity of health information shared via digital platforms. The authors concluded that while social media and mHealth technologies offer exciting possibilities for cancer control, further research, careful attention to data security, and tailored development for culturally diverse groups are necessary to maximize their potential.

Koskan et al. (2014) conducted a systematic review to examine how social media has been used in cancer-related research, focusing on its taxonomy, applications, and the evolution of study designs over time. Searching PubMed, Web of Knowledge, CINAHL, and Google Scholar, they identified 1350 articles and included 69 studies published through October 2013 that met their criteria. Early research (1996–2007) primarily involved descriptive analyses of online forums and message boards, while later studies expanded to include blogs, video-sharing sites like YouTube, and social networking platforms such as Facebook. Most studies ($n=62$) were descriptive; only seven intervention studies were published after 2010. The review highlighted that breast cancer was the most commonly studied disease type. The authors emphasized a significant need for more intervention-based and empirical studies to assess how social media can effectively influence behavior and reduce health disparities. Additionally, they noted gaps in addressing the digital divide and health literacy issues within social media interventions. Koskan et al. concluded that although social media holds considerable promise for enhancing cancer communication and patient support, the field requires more rigorous research designs and focused efforts on underserved populations.

3. Method

This study employed a cross-sectional survey design to investigate Iranian oncology nurses' perceptions of social media use among hospitalized cancer patients. Participants were recruited from multiple hospitals across Iran, with a concentration in Tehran. Eligibility criteria included being currently employed as a nurse in a cancer ward and having at least two years of oncology nursing experience. The minimum age of participants was set at 26 years. A total of 131 nurses participated in the survey, providing a sample that reflects a range of professional experiences within the oncology nursing workforce. The sample encompassed both junior and senior nurses and included participants of

different age groups and genders, although no stratified sampling was applied.

Data were collected through a structured, self-administered questionnaire. The survey instrument included demographic questions (age, gender, professional rank), items assessing life satisfaction (measured on a 10-point Likert scale), personal social media usage (reported as hours per day), and perceptions regarding the benefit of social media use for cancer patients (measured using a 10-point Likert scale). Descriptive statistics were used to summarize participant characteristics. Pearson correlation analyses were conducted to explore bivariate relationships between key variables. Subsequently, a path analysis model was developed to simultaneously test the direct effects of demographic factors, life satisfaction, and personal social media use on nurses' perceptions of social media's benefits for patients. Data were analyzed using SPSS version 28 and visualized using network analysis software for clarity.

Ethical approval for this study was obtained from the appropriate institutional review board prior to data collection. Participation in the survey was voluntary, and informed consent was obtained from all participants. Respondents were assured of the confidentiality and anonymity of their responses, and no identifying information was collected. The study adhered to the principles outlined in the Declaration of Helsinki, ensuring that participants' rights, dignity, and welfare were protected throughout the research process. Participants were informed that they could withdraw from the study at any time without penalty.

4. Findings

The study surveyed 131 Iranian nurses employed in cancer wards across various hospitals, predominantly in Tehran. All participants had a minimum of two years' experience working with oncology patients, and the minimum age was 26 years.

Table 1. Demographic characteristics of participants (N= 131)

Characteristic	Category	n	%
Age	26–35 years	85	64.9
	36–45 years	33	25.2
	>45 years	13	9.9
Gender	Female	102	77.9
	Male	29	22.1
Rank	Junior Nurse	94	71.8
	Senior Nurse	37	28.2

Participants ranged in age from 26 to 54 years, with a mean age of 34.8 years (SD= 6.5). The majority (65%) were aged between 26 and 35 years, 25% were between 36 and 45 years, and 10% were over 45 years.

Among the participants, 78% identified as female and 22% as male, reflecting the gender distribution typical of the nursing profession in Iran.

Nurses were categorized based on their professional rank: 72% were classified as junior nurses (less than 5 years of oncology experience), and 28% were senior nurses (5 years or more of oncology experience).

The survey explored nurses' perceptions of the role of social media in the lives of hospitalized cancer patients. Participants were asked to rate the statement, "Using social media is good for patients' morale", on a 10-point Likert scale, where 1 indicated "not at all beneficial" and 10 indicated "absolutely beneficial". The results revealed a generally positive view among the nurses, with a mean score of 7.1 (SD= 1.8), indicating that, overall, nurses believed social media use could significantly enhance patients' emotional well-being. Specifically, 68% of participants rated the impact at 7 or higher, reflecting a strong endorsement of social media's benefits for patient morale. In contrast, 20% rated it between 4 and 6, suggesting a more cautious or neutral perspective, while 12% rated it between 1 and 3, indicating skepticism or concern regarding its usefulness. Qualitative feedback from open-ended comments suggested that many nurses saw social media as a valuable tool for maintaining patients' connections with family and friends, accessing emotional support groups, and providing distraction from the stresses of hospitalization. However, a minority of participants raised concerns about potential negative effects, such as exposure to misinformation, increased anxiety, or emotional distress caused by uncontrolled online content. Overall, while the majority of oncology nurses perceived social media as a supportive and morale-boosting tool for cancer patients, there remained an awareness of the need for careful monitoring and patient education to mitigate potential risks.

The survey evaluated participants' overall life satisfaction through a single-item measure. Nurses were asked to respond to the question, "On a scale from 1 to 10, how satisfied are you with your life overall? (1= extremely dissatisfied, 10= extremely satisfied)." The findings indicated generally low to moderate levels of life satisfaction among the participants. The mean life satisfaction score was 5.2 (SD= 2.1), suggesting a modest degree of contentment with considerable variability among individuals. Only 28.2% of the nurses reported high levels of life satisfaction (scores between 7 and 10), while 46.6% indicated moderate satisfaction (scores between 4 and 6). Alarmingly, 25.2% of respondents rated their satisfaction between 1 and 3, highlighting a substantial proportion of nurses experiencing significant dissatisfaction with their lives.

In addition to assessing perceptions of patients' social media use, the survey collected data on the nurses' own patterns of social media engagement. Participants were asked to report the average number of hours they spent on social media each day. Approximately 16% of the

nurses indicated that they had no presence on social media, reflecting a complete abstention from these platforms. Among the remaining participants, the majority reported moderate usage: 41% reported spending between one and two hours daily on social media, and 28% reported usage between two and four hours per day. A smaller group, accounting for 12%, indicated that they used social media for four to five hours daily. Only 3% of the participants reported extensive use, spending five or more hours on social media each day. These findings suggest that while a substantial majority of oncology nurses in Iran are active on social media to some extent, their usage patterns tend to be moderate rather than intensive, with very few engaging in prolonged daily use.

The relationship between nurses' age and their perceptions of the benefits of social media use for cancer patients revealed a notable trend. Younger nurses, particularly those between 26 and 35 years of age, reported more favorable views, with a mean perception score of 7.5 (SD= 1.6). In contrast, nurses aged 36–45 years had a mean score of 6.9 (SD= 1.7), while those over 45 years reported a lower mean score of 6.4 (SD= 1.9). Although the differences were moderate, the trend suggests that younger nurses may perceive social media as more beneficial for patient morale, potentially due to their greater personal engagement with digital technologies. This finding is consistent with broader generational patterns observed in technology acceptance research, where younger cohorts typically show greater enthusiasm toward integrating new communication platforms into healthcare settings.

Gender differences in nurses' perceptions were minimal. Female nurses reported a mean perception score of 7.0 (SD= 1.8), while male nurses reported a mean of 7.2 (SD= 1.9). Statistical analysis indicated that this difference was not significant, suggesting that gender does not substantially influence nurses' views on the impact of social media on patient morale. This finding indicates that across genders, oncology nurses largely share a common perspective regarding the psychosocial benefits of social media use among hospitalized cancer patients. It also highlights that in this professional context, technological attitudes may be shaped more by clinical experience and cultural familiarity with social media rather than gender-based differences.

Professional rank showed a modest association with perceptions of social media's benefits. Junior nurses (defined as having less than five years of oncology nursing experience) reported higher mean perception scores (mean= 7.3, SD= 1.7) compared to senior nurses (mean= 6.7, SD= 1.9). This difference suggests that less experienced nurses might be more open to the integration of digital tools in patient care, possibly reflecting their greater exposure to contemporary educational practices that emphasize the role of technology in holistic health management. In contrast, more senior nurses, while still recognizing the potential value

of social media, may adopt a more cautious stance, likely informed by longer clinical experience and a more critical awareness of potential risks, such as misinformation and breaches of patient privacy.

To examine the association between nurses' personal social media usage and their perceptions of its benefits for cancer patients, a Pearson correlation analysis was conducted. The results indicated a small but statistically significant positive correlation between the number of hours spent on social media daily and the perception of social media's benefit to patient morale ($r = 0.29$, $P < 0.01$). This suggests that nurses who spent more time using social media themselves tended to view its effects on patients more favorably. Although the strength of the relationship was modest, the positive direction of the association supports the notion that greater personal familiarity and engagement with social media may foster more optimistic attitudes regarding its psychosocial advantages in clinical care. However, given the correlational design of the study, it is not possible to infer causality from these findings.

To explore the potential association between nurses' life satisfaction and their perceptions of social media's benefits for cancer patients, a Pearson correlation analysis was conducted. The results revealed a weak positive correlation between life satisfaction and perception scores ($r = 0.18$, $P = 0.04$). This finding suggests that nurses who reported higher levels of life satisfaction were slightly more likely to view social media as beneficial to patients' morale. However, the strength of the association was weak, indicating that while a positive relationship exists, life satisfaction explains only a small proportion of the variance in nurses' perceptions.

A path analysis was conducted to examine the simultaneous relationships between demographic factors, life satisfaction, personal social media usage, and nurses' perceptions of the benefits of social media use for cancer patients. The final model included five predictors: age, gender, professional rank, life satisfaction, and daily hours spent on social media. As shown in Figure 1, the strongest predictor of positive perceptions was the number of hours spent on social media daily ($\beta = 0.29$), indicating that greater personal engagement with social media was associated with more favorable views of its utility for patient morale. Life satisfaction also showed a positive relationship with perceptions ($\beta = 0.18$), although the effect size was comparatively smaller.

Among demographic variables, age demonstrated a moderate negative relationship with perceptions ($\beta = -0.22$), suggesting that younger nurses were more likely to perceive social media as beneficial for patients. Similarly, professional rank was negatively associated with perceptions ($\beta = -0.15$), with junior nurses tending to report more positive views than senior nurses. Gender showed a very weak positive association ($\beta = 0.05$) with perceptions, indicating minimal influence.

Overall, the model highlights that both personal factors (life satisfaction and social media use) and demographic characteristics (particularly age and rank) play roles in shaping nurses' attitudes toward social media use in oncology care, though the magnitude of effects varies. These results underscore the complex interplay between personal experience, professional background, and technological engagement in forming healthcare professionals' opinions about emerging digital interventions.

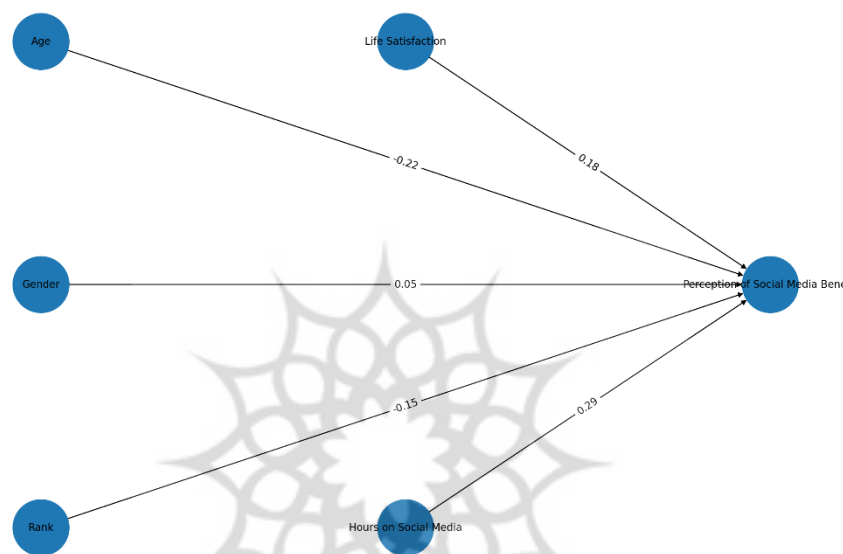


Figure 1. Path analysis model

5. Discussion and Conclusion

This study provides new insights into Iranian oncology nurses' perceptions of the benefits of social media use for hospitalized cancer patients. Overall, the findings suggest that the majority of nurses perceive social media as a valuable tool for enhancing patient morale, providing emotional support, and maintaining social connections during hospitalization. The mean perception score of 7.1 indicates a generally favorable view, which aligns with prior international research suggesting that digital platforms can serve important psychosocial functions for cancer patients (Ventola, 2014; Zhao & Zhang, 2017).

Importantly, the study identified several demographic and personal factors influencing nurses' attitudes. Younger nurses and those with junior professional ranks demonstrated more positive perceptions of social media's role. This finding is consistent with previous research on technology adoption, which highlights that younger professionals often show greater enthusiasm toward the integration of new communication technologies in clinical practice (Gagnon et al., 2012). Conversely, more senior nurses, while still supportive, exhibited relatively lower

endorsement, possibly reflecting a cautious attitude shaped by longer professional experience and greater exposure to risks associated with uncontrolled information dissemination (Wang et al., 2019).

The analysis also revealed that nurses' personal engagement with social media was positively associated with their perception of its benefits for patients. Nurses who spent more time daily on social media reported more favorable views, underscoring the role of familiarity and personal experience in shaping professional attitudes. This aligns with previous observations that healthcare providers' own use of digital platforms influences their openness to recommending such tools to patients (Antheunis et al., 2013). Interestingly, even among those who used social media less frequently, there was still a recognition of its potential utility, suggesting a broad, though varying, level of acceptance across the nursing cohort.

The study further explored the relationship between life satisfaction and nurses' perceptions. Although a weak positive correlation was found, indicating that higher life satisfaction slightly predicted more positive views of social media, the strength of this association was limited. This suggests that while personal well-being may color professional attitudes to some extent, other factors such as institutional culture, prior training, and individual technological competence likely play larger roles in shaping nurses' perspectives. It also highlights the need for supportive organizational environments that can enhance both staff well-being and openness to patient-centered technological innovations (Dyrbye et al., 2017).

Qualitative feedback from nurses added important nuance to the quantitative findings. While most participants emphasized the emotional and social benefits of social media for patients, a minority expressed concerns about exposure to misinformation, heightened anxiety, and privacy breaches. Such concerns echo findings in broader literature regarding the dual-edged nature of digital health engagement (George et al., 2013; Gage-Bouchard et al., 2018). Therefore, while encouraging appropriate social media use among hospitalized cancer patients may be beneficial, it is equally critical to provide patients with guidance on safe and critical consumption of online information.

Finally, it is important to contextualize these findings within the specific Iranian healthcare environment. Cultural factors, regulatory restrictions on digital platforms, and differing patterns of internet usage may uniquely influence nurses' perceptions and patient experiences in Iran. Future interventions aiming to leverage social media as a psychosocial support tool should be carefully tailored to align with local cultural, institutional, and regulatory contexts to maximize their effectiveness.

Conflict of interest

The authors declared no conflicts of interest.

Authors' contributions

All authors contributed to the original idea, study design.

Ethical considerations

The authors have completely considered ethical issues, including informed consent, plagiarism, data fabrication, misconduct, and/or falsification, double publication and/or redundancy, submission, etc. This article was not authored by artificial intelligence.

Data availability

The dataset generated and analyzed during the current study is available from the corresponding author on reasonable request.

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